| · · · · · · · · · · · · · · · · · · ·  | Application No.   | Applicant(s)  |                   |
|--|---|---|-------------------|
| Notice of Allowability   | 09/941,283  | BRADFORD ET AL.   |                   |
|  | Examiner  | Art Unit  |                   |
|  | Susan W Berman  | 1711  |                   |
| The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS (herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGOR (IN COMMOND) THE MERIT OF | OR REMAINS) CLOSED in<br>or other appropriate comm<br>GHTS. This application is a | n this application. If not included unication will be mailed in due cou | ırse. <b>THIS</b> |
| 1. This communication is responsive to <u>01-22-2004</u> .   |   |   |                   |
| 2. $\boxtimes$ The allowed claim(s) is/are <u>1-21</u> .   |   |   |                   |
| 3. The drawings filed on are accepted by the Examiner  |   |   |                   |
| 4. ☐ Acknowledgment is made of a claim for foreign priority und a) ☐ All b) ☐ Some* c) ☐ None of the:  1. ☐ Certified copies of the priority documents have 2. ☐ Certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:   | been received.<br>been received in Applicatio<br>uments have been receive         | on No<br>od in this national stage application                          |                   |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" of noted below. Failure to timely comply will result in ABANDONMI THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  |   | ea reply complying with the require                                     | ements            |
| <ol> <li>A SUBSTITUTE OATH OR DECLARATION must be submit<br/>INFORMAL PATENT APPLICATION (PTO-152) which give</li> </ol>   |   |   | ICE OF            |
| 6. CORRECTED DRAWINGS ( as "replacement sheets") must  | : be submitted.   |   |                   |
| (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached   |   |   |                   |
| 1) ☐ hereto or 2) ☐ to Paper No./Mail Date   |   |   |                   |
| (b) ☐ including changes required by the attached Examiner's<br>Paper No./Mail Date   | Amendment / Comment o   | r in the Office action of   |                   |
| Identifying indicia such as the application number (see 37 CFR 1.6 each sheet, Replacement sheet(s) should be labeled as such in the   | 34(c)) should be written on t<br>be header according to 37 Cl                     | he drawings in the front (not the bac<br>FR 1.121(d).                   | k) of             |
| <ol> <li>DEPOSIT OF and/or INFORMATION about the depose attached Examiner's comment regarding REQUIREMENT F</li> </ol>   |   |   | the               |
| Attachment(s) 1. ☐ Notice of References Cited (PTO-892)  | 5. ☐ Notice of Ir   | nformal Patent Application (PTO-15                                      | 52)               |
| 2. Notice of Draftperson's Patent Drawing Review (PTO-948)   | 6. ☐ Interview S  | Summary (PTO-413),  |                   |
| Information Disclosure Statements (PTO-1449 or PTO/SB/08  Pener No. (Meil Date)  Pener No. (Meil Date)   |   | /Mail Date<br>Amendment/Comment   |                   |
| Paper No./Mail Date  4.  Examiner's Comment Regarding Requirement for Deposit  | 8. 🛭 Examiner's   | Statement of Reasons for Allowar  | nce               |
| of Biological Material   | 9. 🗌 Other  | _·  |                   |
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## Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01-22-2004 has been entered.

## Reasons for Allowance

The following is an examiner's statement of reasons for allowance: Upon reconsideration in response to applicant's arguments presented 01-22-2004, it is agreed that the claims limitations set forth in claim 1 and in the dependent claims with respect to the nonvolatile weight ratio "UV/Th" distinguishes the instantly claimed compositions from those taught in the cited art. Applicant has amended claim 1 to recite that components (a2) and (a3) contain "substantially no functional groups having bonds activatable upon exposure to ultraviolet radiation", which further distinguishes the instantly claimed compositions from those in the prior art by further limiting the number of radiation curable functional groups available in the compositions. The dependent claims set forth additional limitations with respect to UV/Th ratio, ratio of NCO groups to co-reactive functional groups, % aromatic ring moieties, and polydispersity that are not taught in the cited prior art.

Larhmann et al teach that the crosslinking density of the film may be adjusted via the functionality of the binder constituents used (column 8, lines 44-49), but do not suggest the instantly claimed limitations. The examples, specifically Examples 6 and 8, in Larhmann et al appear to teach a higher number of radiation curable groups than thermally curable groups.

Sirkoch et al (4,634,602) disclose dual curable compositions comprising a radiation sensitive compound, a radiation insensitive compound containing hydroxyl groups and a crosslinking agent

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selected from aminoplast resins and blocked isocyanates and a reactive diluent. Sirkoch et al teach weight percents in claims 8-10 that overlap the instantly claimed ratio, but do not teach limiting the number of radiation curable functional groups to get a UV/Th ratio as defined by applicant.

DE Patent 99 141 (translation supplied by applicant) discloses compositions for SMC and BMC coating comprising component (a1) corresponding to instantly claimed component (a2) corresponding to instantly claimed component (a3) and component (a7) corresponding to instantly claimed component (a2). While the compositions disclosed would be expected to include composition that provide the UV/TH ratio set forth in the instant claims, DE '141 does not teach or suggest limiting the composition to those having a UV/TH ratio set forth in the instant claims.

EP '892, already of record, teaches compositions comprising a polyester polyol and a radiation curable polyester with a crosslinking agent for the polyol. However, EP '892 does not teach the UV/Th ratio set forth in the instant claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan W Berman whose telephone number is 571 272 1067. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571 272 1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Susan W Berman Primary Examiner Art Unit 1711

Ausan Bern

SB 4/19/04